ATLAS DER NORMALEN UND PATHOLOGISCHEN ANATOMIE IN TYPISCHEN RÖNTGENBILDERN. Die angeborene Luxation des Hüftgelenkes (congenital luxation of the hip-joint) von Geh. Med.-Rat. Professor Dr. MAX SCHEDE. Hamburg: Lucas Gräfe u. Sillem, 1900.

ATLAS OF NORMAL AND PATHOLOGICAL ANATOMY IN TYPICAL RÖNTGEN PICTURES.

THIS work is a monograph of twenty-three pages, to which is appended a series of forty-four excellent reproductions of skiagraphs, which serve to illustrate very graphically the subject-matter of the text. The author goes over the subject of congenital dislocation of the hip systematically, setting forth his own views in matters in which he disagrees with the commonly accepted teachings of the day. After a brief historical sketch the author takes up the etiology, the direction of the primary luxation, incomplete luxation, and the pathological anatomy of the parts concerned. The hypothesis of Dollinger, who attributes this congenital malformation to a premature union of the epiphyseal lines in the acetabulum, the author is inclined to discredit. Such a phenomena as Dollinger describes will not be met with in more than 1 per cent. of cases, and should not, therefore, be regarded as an etiological factor.

Whatever may have been the condition in the first and second year of life, there is no doubt that in the majority of cases the head, at the time of the first observation, is displaced upward and backward, or, in other words, that the dislocation is upon the dorsum ilii.

Of the commonly described alterations in the structure of the head and neck, such as the flattening of the head and the variations from the normal angle between the neck and shaft, by far the most important, from the therapeutic stand-point, is the disturbance of relationship between the upper and lower ends of the femur. The upper end, and, therefore, the head, is in a position of outward rotation, while the lower end occupies a position midway between outward and inward rotation. The author continually emphasizes the absolute necessity of taking advantage of our knowledge of this fact when considering methods of reduction and methods of retention. The greater part of the monograph is devoted to the most interesting phase of the subject, namely, the treatment. Of the relative merits of the methods of Mikulicz, Hoffa, Paci, and Lorenz, the author considers the latter the most rational, for the methods of Mikulicz and Hoffa are only applicable to cases in which retention is attended with no great difficulty, while that of Paci is objected to on the ground that its application is limited also to a particular group of cases. Exception is taken to the position in which Lorenz places the limb after reduction, viz., that of outward rotation. According to Schede, no position seems to make reluxation easier than that of outward rotation; therefore, after reduction the fixation dressing should be applied with the limb rotated inward. On the assumption that the position of outward rotation is one which favors reluxation, the author recommends the performance of a subtrochanteric osteotomy by which this deformity of the upper end of the femur may be corrected. The operation is not performed until one and a half to three months—according to the resistance offered by the external rotators—have elapsed since reduction was effected, during which time the limb has been in a position of abduction and inward rotation.

The technique of the operation: Every precaution being taken to prevent reluxation during its performance, a gold-plated steel needle is thrust in through the trochanter, neck, and half way through the head of the femur, the end of the needle projecting some 3 cm. from the cutaneous surface. By means of this needle the upper fragment can be placed after the osteotomy in the desired position. Having divided the bone just below the small trochanter by a linear subcutaneous osteotomy, the lower fragment is rotated outward until the patella looks directly forward, and with the limb in this position the plaster dressing is applied. The needle is not removed until union is firm, which will be about the fifth week. From this time on for a period of three to six months a plaster dressing reaching to the lower third of the thigh must be worn, together with a brace connecting the cast with the shoe, by means of which the limb is retained in the proper position. As to the results and the justifiability of such an operation, the author expresses his unqualified approval of it, and believes that with its adoption not only will a number of hitherto unimproved cases be materially improved, but a great percentage of all cases be cured. (This operation is precisely similar to one recommended by Kocher to correct the torsion of the upper end of the femur met with in coxa vara.) After commenting upon his method of reduction, the author in conclusion presents some statistics based upon his personal observations in 268 luxations in 182 children. Following the classification of Peterson to Group A, or that in which reposition was complete and the ultimate result perfect, belong forty-one patients with fifty joints, fourteen going without apparatus; to Group B, or that in which the head occupies a position in the upper and outer edge of the acetabular rim and in which function is good, belong sixty-one patients with sixty-six joints; in Group BC, that in which the head was displaced still further outward toward the anterior superior spinous process of the ilium, and in Group C, in which the head is immediately beneath this process, were (BC) nineteen children with twenty-six joints, and (C) twenty-seven with thirty-six joints; ten patients with sixteen joints belonged to Group CD, which corresponds somewhat to the class of supracotyloid and iliac luxations described by Lange. In twenty-two cases the treatment was for some reason given up, and in twelve cases, all between seven and fifteen years of age, either the luxation was irreducible or the head could not be retained after reduction. Of the series in which perfect results were obtained (Group A) 22 per cent. were cases of bilateral luxation as compared with 34.4 per cent. in Group B. Of the total number 111 were under seven years of age, the remaining seventy-one over seven.

The reproductions, which have been made from first-class skiagraphs, are most instructive and enhance to no small degree the value of this monograph as a work of reference. By one interested in congenital luxation of the hip, a subject which of recent years has attracted so much attention, this monograph will be read with interest, inasmuch as it represents the views of a noted clinician based upon experience and personal observation with a remarkably large series of cases. Of additional interest is the author's contribution to the treatment—subtrochanteric osteotomy—an operation which he is prepared to indorse after its performance in some fifty cases—an addition to the mechanical therapeusis of this deformity, which he believes will be found to be of the greatest assistance in preventing recurrence after the luxation has been reduced. C. H. F.

TEXT-BOOK OF THE EMBRYOLOGY OF INVERTEBRATES. By DR. E. KORSCHELT and DR. K. NEIDER. Translated by Matilda Bernard. Revised and edited by Martin F. Woodward. Vol. IV. London: Swan, Sonnenschein & Co., 1900.

THE appearance of this volume realizes the long anticipated completion of the English translation of this excellent German work. The present part includes the development of Amphineura, Lamellibranchia, Solenoconcha, Gastropoda, Cephalopoda, Tunicata; and Cephalochorda.

The marked activity in the investigation of invertebrates during the eight years that have elapsed since the appearance of the German text has resulted in many advances and greater accuracy in our knowledge of the development of these forms. Such gains necessitate frequent modification, or complete revision, of the accepted views of a decade ago; the duties, therefore, of the editor of a text-book which shall be a trustworthy guide along scientific paths so subject to change are far from perfunctory. The task imposed upon Dr. Woodward in bringing the account of the development of the mollusks and the tunicates as originally written into accord with the results of the later researches in these groups has been no light one.

The section dealing with the Mollusca has been extensively revised by alterations and additions, so that it offers an excellent presentation of the development of this group. It is to be regretted that the chapters dealing with the Tunicata have not had the advantage of similar revision, since the repeated contradictions given to the statements of the original text by the necessary footnotes by the editor are conducive neither to the pleasure nor the patience of the reader.

The final chapter of the work on the Cephalochorda, by Prof. Neider, presenting an excellent outline of the development of the amphioxus, has a deep interest even for those especially engaged in following the embryology of the highest types, since study of the simplified developmental processes occurring in this low animal has materially aided in appreciating the significance of the complex relations presented in the most highly specialized, including man.

The systematic position of the amphioxus has long engaged the earnest thought of the foremost zoologists. The inclusion of the amphioxus within the discussion of the invertebrates, however, must not be taken as a denial of its generally accepted place at the foot of the vertebrate series, for the author concludes that the animal may be regarded as the "primitive vertebrate," enjoying, however, in a sense a certain independence of position. The view championed by Dohrn, that the amphioxus represents a degenerate form derived from the Craniata, is not accepted, but, on the contrary, the conclusion is reached, based upon the established facts of its ontogeny and anatomy, that this animal represents a very primitive form.

The closing pages of the book are devoted to the broad problem of the ancestry of the vertebrates. After pointing out the inadequacy of